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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,573	03/07/2002	Carl Joseph Kraenzel	042846-0312968	7969
53796 7590 12/28/2009 PILLSBURY WINTHROP SHAW PITTMAN, LLP c/o SUSAN TRADER 1650 TYSONS BOULEVARD P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER NGUYEN, TAN D				
ART UNIT 3689		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/091,573

**Applicant(s)**

KRAENZEL ET AL.

**Examiner**

Tan Dean D. Nguyen

**Art Unit**

3689

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-6,8,12,14,15,17-19,21,25-27,29-31,33 and 37-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,12,14,15,17-19,21,25-27,29-31,33 and 37-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-840)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9//30/09 has been entered.

***Response to Amendment***

2. The amendment filed 9//30/09 has been entered.

***Claim Status***

3. Claims 1-2, 4-6, 8, 12, 14-15, 17-19, 21, 25-27, 29-31, 33, 37-42 are pending. Claims 3, 7, 9-11, 13, 16, 20, 22-24, 28, 32, 34-36 have been canceled. The pending claims comprise 3 groups of claims:

- 1) Method: 1-2, 4-6, 8, 12, and 38-42,
- 2) System<sup>1</sup>: 14-15, 17-19, 21 and 25,
- 3) A computer program product: 26-27, 29-31, 33 and 37.

As of 9/30/09, independent method claim 1 is as followed:

1. (Currently Amended) A computer-implemented method for identifying synergistic opportunities among users within a computer network by matching users with a common user-generated topic of interest, the computer-implemented method comprising:

a) receiving a topic of interest and associated information from a first user on a user interface on a first computer;

b) storing the received topic of interest declared topics and the associated information on a storage medium in communication with the first computer;

c) monitoring computing activities of a second user by a software monitoring module;

d) determining if the second user appears to be interested in ~~a-declared~~ the received topic based on the monitored activities of the second user and based on the ~~declared topic's~~ associated information; and

e) notifying the second user of the existence of the ~~declared-received~~ topic if it appears that the second user is interested in the ~~declared-received~~ topic.

Note: for convenience, letters (a)-(d) are added to the beginning of each step.

### ***Finding of Facts***

1) Note that the term "a server" can be defined as software.

**Server:** "2. On the Internet or other network, a computer or program that responds to commands from a client." Computer Dictionary, 3<sup>rd</sup> Edition, Microsoft Press, Redmond, WA, 1997.

see *Merriam-webster Online Dictionary*, available at <http://www.merriam-webster.com/dictionary/event> (visited on August, 1, 2009).

### ***Principles of Laws***

4. The preamble is normally considered "being optional" and does not have much patentable weight since many times it is merely statements of purpose or intended use. See MPEP 2111.02 It's the body of the claim that matters and the current body of the claims have no tie to any particular machine. *Coming Glass Works*, 868 F.2d at 1257, 9 USPQ2d at 1966. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation"); *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ2d at 480-81 (preamble is not a limitation where claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim); *STX LLC. v. Brine*, 211 F.3d 588, 591, 54 USPQ2d 1347, 1350 (Fed. Cir. 2000) (holding that the preamble phrase "which provides improved playing and handling characteristics" in a claim drawn to a head for a lacrosse stick was not a claim limitation).

5. Note: independent claims 14-15, 17-19, 21 and 25 are/appear to be an apparatus claim. In examination of the apparatus claim, the claims must be structurally distinguishable from the prior art. While features of an apparatus claim may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See (1) MPEP 2114. (2) *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Apparatus claims cover what a device is, not what a device does, i.e. "device which acts or performs ...". (3) *Hewlett-Packard Co. vs. Bausch & Lomb Inc.* (Fed. Circ. 1990). Manner of operating the device or elements of the device, i.e. recitation with respect to the manner in which a claimed apparatus is intended to be employed/used, does not differentiate apparatus from the prior art apparatus. (4) *Ex parte Masham*, 2 USPQ2d 1647 (BPAI, 1987).

Note that in apparatus claim, descriptions to positive claim language, such as produced when one uses the term "configured" or, even more positively, 35 U.S.C. 112, sixth paragraph language. Using any other claim format such as using method steps, should not be given the same interpretation of the machine claim since to do so would be to dilute the provisions of the statute.

Also, this is an apparatus claim and intended use limitation for the system/device or apparatus, i.e. "for identifying synergistic ...." carries no patentable weight.

6. **NOTE**: Exemplary claim language of an ideal computer system/machine tied to a program is given as follows:

A computer-readable storage medium having stored thereon a computer program for "xxxx", the computer program comprising a routine set of instructions which when executed **by a computer machine cause the computer machine to perform the steps of:**

"xxxx".

7. In method claims 8, 12, the phrase "...to receive information", "to be added...", is not a positively recited method step but, rather, is mere intended use of the created request and thus having no patentable weight. See MPEP 2173.05 (q), 2106, and 2111.04, which indicate that a method claim requires active, positive steps. Also, similar phrases such as: "for storing ...", are considered as intended use and having no patentable weight.

As for the type of information or descriptions, they are considered as non-functional descriptive material (NFD) on the data of "...", thus having no patentable weight. The mere insertion of "topic" or "key word", data over "data" does not "impart functionality when employed as a computer component", thus having no patentable weight.

See MPEP 2106.01 "Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of

Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

### **2106.01 Computer-Related Nonstatutory Subject Matter [R-6]**

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754, 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diamond v. Diehr*, 450 U.S. 175, 185-86, 209 USPQ 1, 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See



also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory and should be rejected under 35 U.S.C. 101. In addition, USPTO personnel should inquire whether there should be a rejection under 35 U.S.C. 102 or 103. USPTO personnel should determine whether the claimed nonfunctional descriptive material be given patentable weight. USPTO personnel must consider all claim limitations when determining patentability of an invention over the prior art. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 403-04 (Fed. Cir. 1983). USPTO personnel may not disregard claim limitations comprised of printed matter. See *Gulack*, 703 F.2d at 1384, 217 USPQ at 403; see also *Diehr*, 450 U.S. at 191, 209 USPQ at 10. However, USPTO personnel need not give patentable weight to printed matter absent a new and unobvious functional relationship between the printed matter and the substrate. See *Lowry*, 32 F.3d \*\*>at< 1583-84, 32 USPQ2d \*\*>at< 1035 \*\*; In re Ngai, 367 F.3d 1336, 70 USPQ2d 1862 (Fed. Cir. 2004).

## **I. FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES" REPRESENTING DESCRIPTIVE MATERIAL *PER SE* OR COMPUTER PROGRAMS REPRESENTING COMPUTER LISTINGS *PER SE***

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**12. Claims 1-2, 4-6, 8, 12, and 38-42 (method), 14-15, 17-19, 21 and 25 (system), and 26-27, 29-31, 33 and 37 (computer program product) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over HERZ.**

**As for independent claim 26, 14, and 26**, HERZ fairly teaches a method, system, and article for identifying synergistic opportunities among users within a computer network by matching users with a common user-generated topic of interest, the computer-implemented method comprising:-

a) receiving a topic of interest and associated information from a first user on a user interface on a first computer;

{see Figs. 10, 15, col. 67, cols. 92-94}

b) storing the received topic of interest declared topics and the associated information on a storage medium in communication with the first computer;

{see Figs. 2, 10}

c) monitoring computing activities of a second user by a software monitoring module;

{see Fig. 5, element 506, col. 67, lines 40-55}

d) determining if the second user appears to be interested in the received topic based on the monitored activities of the second user and based on the associated information; and

{see col. 67, lines 40-55}

e) notifying the second user of the existence of the received topic if it appears that the second user is interested in the received topic.

{see col. 67, lines 40-55, cols. 92-94}

Alternatively, the applying of the customer profiling and identifying of desirable objects to other business issues or strategies would have been obvious as mere using the same system for other similar business issues.

As for dep. claims 2, 4-6 (part of 1 above), 15, 17-19 (part of 14 above), and 27, 29-31 (part of 26 above), which respectively have similar limitation, and deal with object monitoring parameters, i.e. email messages, instant messages, search request messages, etc., they are taught in cols. 94, lines 1-45, cols. 67, cols. 81-82, col. 83.

As for dep. claim 8 (part of 1 above), 21 (part of 14 above), and 33 (part of 26 above), which respectively have similar limitation, these are taught in cols. 67, and 93-94.

As for dep. claim 12 (part of 1 above), 25 (part of 14 above), and 37 (part of 26 above), which respectively have similar limitation, these are taught in cols. 67, and 93-94.

As for dep. claims 38, 39 (part of 1 above), which deal with object monitoring parameters, i.e. information type or descriptions, these are taught in cols. 65, 67, 83. Moreover, they are considered as non-functional descriptive material (NFD) on the data of "...", thus having no patentable weight. The mere insertion of "topic" or "key word", data over "data" does not "impart functionality when employed as a computer component", thus having no patentable weight.

See MPEP 2106.01 "Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

As for dep. claims 40 and 42 (part of 1 above), which deal with various parties monitoring and communication parameters, these are taught on cols. 67, 81-82, and 93-94.

As for dep. claim 41 (part of 1 above), which deal with the location of the monitoring system, this is inherently included in the teachings as shown on Figs. 2, 10, cols. 49-52.

***Response to Arguments***

13. Applicant's arguments with respect to the previous claims rejections have been considered but are moot in view of the new ground(s) of rejection which are caused by applicant's amendment of the claims.

No claims are allowed.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct@uspto.gov>. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

1. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).
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**Washington, D.C. 20231**

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3. In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail [CustomerService3600@uspto.gov](mailto:CustomerService3600@uspto.gov).

4. Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number **(571) 272-6806**. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday. Should I be unavailable during my normal working hours, my supervisor Janice Mooneyham can be reached at **(571) 272-6805**. The main **FAX phone** numbers for formal communications concerning this application are **(571) 273-8300**. My personal Fax is **(571) 273-6806**. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

/Tan Dean D. Nguyen/  
Primary Examiner, Art Unit 3689  
12/18/09